



Department of Energy

Ohio Field Office  
Fernald Area Office

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



6-104.38

- 2692

DEC 17 1999

Mr. James A. Saric, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0228-00

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT FOR THE PERIOD NOVEMBER 1, 1999,  
THROUGH NOVEMBER 30, 1999**

This letter transmits the amended Consent Agreement Monthly Report for the period of November 1, 1999, through November 30, 1999. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA).

If you have any questions, please contact me at (513) 648-3139.

Sincerely,

FEMP:Reising

Johnny W. Reising  
Fernald Remedial Action  
Project Manager

Enclosure

Mr. James A. Saric  
Mr. Tom Schneider

-2-

DEC 17 1999

cc w/enclosure:

N. Hallein, EM-42; CLOV  
G. Jablonowski, USEPA-V, SRF-5J  
D. Sarno, FCAB  
V. Dastillung, FRESH  
P. Dunn, FRESH  
F. Barker, Tetra Tech  
D. Carr, FDF/52-2  
T. Hagen, FDF/65-2  
T. Walsh, FDF/65-2  
AR Coordinator, FDF/78

cc w/o enclosure:

A. Tanner, OH/FEMP  
F. Bell, ATSDR  
M. Schupe, HSI GeoTrans  
J. Harmon, FDF/90  
R. Heck, FDF/2  
S. Hinnefeld, FDF/31  
B. Irvine, FDF/65-2  
ECDC, FDF/52-7

- 2692

2

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- 2692

**Introduction**

This report describes actions at the Fernald Environmental Management Project (FEMP) from November 1, 1999 through November 30, 1999. The monthly report has been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- 2692

**OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT**

November 1999

- Enforceable Milestones Expected to be Completed
  - Authorization for Full Scale Operations given to IT Corporation on November 16, 1999
- Major Work Initiated/Continued/Completed
  - Processed 16,983 tons of material from waste pits, shipped 153 railcars of material for disposal at Envirocare of Utah
  - Initiated and completed Standard Startup Review (SSR) for Dryer Operations
  - Declared readiness for Authorization of Full Operations by FDF and IT Corporation on November 16, 1999

December 1999 (Anticipated)

- Enforceable Milestones Expected to be Completed
  - None
- Major Work to be Initiated/Continued/Completed
  - Process 15,065 tons of material from waste pits, ship 113 railcars of material for disposal at Envirocare

**OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY AND SOIL CHARACTERIZATION AND EXCAVATION PROJECT**

**Additional OU2 soils-related activities reported under OU5/Soils Characterization and Excavation Project**

November 1999

- Enforceable Milestones
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
- Major Work to be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Continue placement of impacted materials in Cells 1 and 2
    - Begin placement of Categories 1, 2, and 3 materials in Cell 3
    - Complete placement of three feet of select cover in Cell 3

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

-- 2692

- Soil Characterization and Excavation Project (SCEP)
  - Area 1, Phase II
    - Initiated testing of excavation dewatering pumps, addressed contractor's punchlist items in the Sewage Treatment Plant (STP) Excavation and Trap Range Area
  - Area 2, Phase I
    - Received and commented on the draft summary report from the contractor showing stabilization results below toxicity characteristic levels in the Firing Range area
    - Completed excavation of SouthField Stockpile
    - Continued excavation of SouthField
    - Began excavation of bottom half of Active Flyash Pile
  - Area 2, Phase II
    - Received approval for Part One/Nonwaste Unit predesign
    - Began Realtime Scanning and handheld field demonstration of ground penetrating radar
    - Responded to Agency comments on "Predesign Project Specific Plan for A2P11 Parts 2 and 3"; revised and resubmitted for approval
  - Area 2, Phase III
    - Continued data validation for Part One
    - Submitted Integrated Remedial Design Plan (IRDP) for Part Two
  - Other Areas
    - Began to prepare 90% design on Area 3A/4A Title I/II Design Work
    - Continued work on the construction contract for the OSDF and Area 3A/4A excavation
    - Began sampling near K-65 Trench to support Lime Sludge Pond project
    - Obtained access from property owners in A9P1 area. A walk-through, with the landowner, occurred on November 22, 1999
- Real Time Program
  - Continued to establish QA/QC program for instrumentation
  - Completed construction of calibration pad
  - Continued work on setting up the calibration pad for High Purity Germanium (HPGe) and Sodium Iodide (NaI) detectors
  - Continued development of methods and procedures for documenting the calibration pad process
  - Continued to determine need for revision of RTRAK applicability Study
  - Continue documenting calibration of a sodium iodide detection system placed on a John Deere Gator

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Continued to calibrate RSSII (a sodium iodide detection system on a second stroller) data
- Natural Resource Restoration
  - Dept. of Interior and Ohio Attorney General's office continues to draft settlements
- Wetland Mitigation - Phase I
  - Completed all planting in the area
- Conservation Area OU4 Supplemental Environmental Project
  - US Army Corp of Engineers made final offer to land owners regarding land easements, which was rejected; the project is being cancelled
- Ecological Research Projects
  - Subprojects consisting of
    - 1) Identification and Control of Invasive Species, continue to monitor growth of plants
    - 2) Continuing to monitor the growth of A1PI and A8PI vegetation plots continues
    - 3) Continue ecological restoration case study by Texas Southern University is in progress
    - 4) Completed planting of American Chestnut Trees
- Final Land Use
  - Continued to draft Master Plan for Public Use

**December 1999 (Anticipated)**

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Continue placement of impacted materials in Cells 1 and 2
    - Begin winterization of Cells 1, 2, and 3 (dependent upon the weather)
    - Continue placement of categories one through 3 in Cell 3
    - Begin temporary seeding in exposed areas
    - Continue to await comments on "Evaluating Required Minimum Thickness of Intervening Horizon of Category I Impacted Report" from the Agencies
  - Soil Characterization and Excavation Project (SCEP)
    - Area 1, Phase II
      - Issue as-builts and close out Site Preparation Project

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Immobilizing field sampling crews to begin certification sampling in STP Excavation and Trap Range areas will begin upon approval of Certification Design Letter and project Specific Plan
- Remove sediment from basin south of West Impacted Materials Stockpile
- Remove ramp and 6 inches of stockpile footprint
- Begin STP and Trap Range as-builts
- Area 2, Phase I
  - Await Agency approval of sampling results regarding the Firing Range area
  - Begin excavation of treated soil for placement in the OSDF
  - Complete stockpile excavation and continue excavation in the SouthField
- Area 2, Phase II
  - Continue realtime sampling and begin physical sampling within A2PII Part 1/Non-Waste Unit
  - Continue ground penetrating radar investigation
  - Await comments on A2PII Parts 2 & 3 predesign Project Specific Plan (PSP)
- Area 2, Phase III
  - Complete data validation and submit Certification Report for Part One
- Other Areas
  - Complete field activities for Area 3A/4A Subsurface Predesign Investigation
  - Review Silos 1, 2, and 3 preliminary designs to determine if additional Waste Acceptance Criteria is necessary and where sampling needs to be scoped
  - Begin precertification real-time and physical sampling activities as a prerequisite to development of Certification Design Letters (CDLs) in A9PI (NOTE: Certification strategy for off-property areas has been incorporated into the "Final Sitewide Excavation Plan" [SEP])
- Real Time Program
  - Draft methods for calibration of NaI and HPGe tools on the calibration pad
  - Initiate revision of "Guidelines, Measurement Strategies, and operation Factors for the Deployment of In-Situ Gamma Spectroscopy at the Fernald Site"
  - Begin project of recalibration all NaI systems
- Natural Resource Restoration
  - Dept. of Interior and Ohio Attorney General's office continues to draft settlements

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Wetland Mitigation - Phase I
  - Begin closeout activities
  - Issue Final As-Built drawings and Summary of Design Changes to Agencies
- Conservation Area OU4 Supplemental Environmental Project
  - Project is being cancelled
- Ecological Research Projects
  - Draft final report from Texas Southern University
- Final Land Use
  - Continue to draft Master Plan for Public Use

**OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT**

November 1999

- Enforceable Milestones
  - None
- Major Work Initiate/Continued/Completed
  - Plant 5 D&D
    - Field completion and demobilization by the subcontractor

December 1999 (Anticipated)

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - Maintenance/Tank Farm D&D and Water Storage Tank Project
    - Turn over from construction to utilities and the completion of the SSR

**OPERABLE UNIT 4 - SILOS PROJECT**

November 1999

- Enforceable Milestones
  - None
- Major Work Initiated/Continued/Completed
  - Began FDF review of the Preliminary Design Package and preliminary Hazard Analysis Report (PHAR) for the Accelerated Waste Retrieval Project (AWR) Project



**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Incorporated DOE, Critical Analysis Team (CAT) and DOE Independent Review Team (DIRT) comments on the Silo 1 and 2 FS Draft Revised Feasibility Study for Silo 1 and 2
- Conducted over-the-shoulder review of Silo 3 Site Preparation package and Design Basis Documents
- Conducted briefings on the Comparative Analysis of Alternatives for the Silos 1 and 2 FS for the Citizens Advisory Board (CAB) Remediation Subcommittee, the full CAB, and the public
- Submitted a request to the Agencies for concurrence to submit the Silo 3 Site Preparation Package for regulator in advance of the entire Remedial Design Package. Implementation of this strategy would allow the Silo 3 contractor to mobilize for excavation and site preparation activities several months in advance of the current baseline schedule

**December 1999 (Anticipated)**

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - Revise draft Revised FS for Silo 1 and 2 to incorporate comments from DOE, CAT and DIRT review, as well as input from recent stakeholder workshops. Prepare draft Proposed Plan
  - Complete review of draft preliminary Design for the Silos 1 and 2 Accelerated Waste Retrieval project. Prepare draft Design package for submittal to the Agencies
  - Brief the Agencies on the baseline schedule and preliminary design for the Silos 1 and 2 AWR Project
  - Begin review of draft Site Preparation package for the Silo 3 Project
  - Initiate and complete waste treatment for the VitPP Waste Disposition Project

**OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT**

**November 1999**

- Enforceable Milestones
  - Submitted monthly NPDES Discharge Monitoring Report to the OEPA on November 12, 1999
  - Met 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Work Initiated/Continued/Completed
  - Submitted responses to OEPA comments on the June 1999 Monthly operating Reports for the Re-Injection Demonstration on November 1, 1999; DOE transmitted to the Agencies on November 10, 1999
  - Completed tie-in of the AWWT Backwash Reroute project on November 18, 1999, piping reroute now being used by operations
  - Completed Conceptual Design of Warehouse/Garage for Vacuum Trucks on November 17, 1999; Initiated Titles I & II on November 24, 1999
  - Conducted 30% informal review of new Leachate Transmission System on November 9, 1999
  - Completed development of Well #24 on November 3, 1999
  - Began pre-design geoprobing in the Waste Storage Area - two locations completed

**December 1999 (Anticipated)**

- Enforceable Milestones
  - Submit monthly NPDES Discharge Monitoring Report to the OEPA covering the previous month
  - Meet 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work to be Initiated/Continued/Completed
  - Submit monthly 1999 Operating Report for the Re-injection Demonstration to DOE for transmittal to the Agencies
  - Complete construction of the AWWT Groundwater Reroute Project
  - Complete construction of multimedia Backwash Reroute Project
  - Conduct 60% informal review of Detail Design package of new leachate Transmission System
  - Continue compiling and evaluating data collected during the Re-Injection Demonstration in preparation for the Re-Injection report
  - Complete preparation of the Groundwater Remedy performance section of the Integrated Environmental Monitoring Plan (IEMP)

**WASTE MANAGEMENT**

**November 1999**

- Enforceable Milestones
  - None
- Work Initiated/Continued/Completed
  - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
    - The project is complete
    - Staged drums of PermaFix cement in Building 30 for shipment

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Thorium Legacy Waste Project (TLWP)
  - Continue supporting the implementation of the Corrective Action plan for the Thorium metal. The final occurrence report was issued on October 28, 1999
  - Performed change outs and maintenance of several HEPA units due to moisture
  - Participated on a team to evaluate options, schedule and cost associated with treatment of the Thorium metal, RCRA Thorium, and wet Low-Level Waste Thorium
  - Drafted a procedure for moving potentially pyrophoric material from one building to another
  - Assisting Low Level Waste Project in the SSR to ship the Thorium LLW to Nevada Test Site (NTS)
- RCI Solvent Extraction Project
  - Initiated movement of remaining OEP equipment from Building 80
- Liquid Mixed Waste (Bulking) Project
  - Continue to evaluate newly generated waste streams for bulking
  - Finalizing Sampling Plan and sampling materials acquisition for the Batch 8-consolidation tank decontamination PCB sampling; Batch 7 decontamination will follow
  - Received approval of application for Batch 9 treatment from TSCA Incinerator; this was forwarded to the State of Tennessee for approval
  - Batches 10, 11, and 12 containers are undergoing final evaluation for possible AWWT treatment
- Hazardous Waste Project
  - Completed shipment of excessed photographic chemicals
- Mixed Waste Shipping
  - Continued review of containers of below-LDR mixed waste for shipment to Envirocare
- Organic Treatment Project
  - Continued draft Absorbent Determination covering the Organic Treatment Project First Article Test

**December 1999 (Anticipated)**

- Enforceable Milestones
  - None
- Work to be Initiated/Continued/Completed
  - Mixed Waste Shipping
    - Continue review of containers of below-LDR mixed waste for shipment to Envirocare
    - Finalize used oil Recycling Statement of Work
    - Prepare annual Fiscal year RCRA/Executive Order 13101 Report

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1999**

- Prepare DOE Pollution Prevention Award for the joint effort between Fernald and Oak Ridge in shipping the 1, 286 metric tons of copper for processing through the National Center for metals recycle
- Liquid Mixed Waste (Bulking) Project
  - Initiate activities to decontaminate Batch 7 and Batch 8 consolidation tanks
  - Activities for completion are to implement in the field
- Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
  - Continue to prepare to ship excess cement drums
- Thorium Legacy Waste Project
  - Implement Corrective Action for the Thorium metal fire
  - Begin self-assessments of material evaluation forms in support of stand-down
- RCI Solvent Extraction Project
  - Move remaining OEP equipment from Building 80 to storage area in Plant 2/3
- Organic Treatment Project (OTP)
  - Finalize absorbent determination to develop container requirements
  - Initiate Technical Review Board data package
- Hazardous Waste/Recycling
  - Prepare to ship Water Treatment Chemical and Vitrification pilot plant excess chemicals off site
  - Continue to work toward on-site asbestos dumpster and asbestos disposal